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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,294	04/02/2001	Tai-Sheng Chou	1146	9256
20551	7590	01/31/2006	EXAMINER	
THORPE NORTH & WESTERN, LLP. 8180 SOUTH 700 EAST, SUITE 200 SANDY, UT 84070			JOHNSON, JONATHAN J	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/824,294	CHOU, TAI-SHENG	
	Examiner	Art Unit	
	Jonathan Johnson	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 November 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-8,10-19 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 2-8,11-14 and 16 is/are allowed.
- 6) Claim(s) 10,15 and 17-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,837,208 (Grott). Grott teaches a quench box manifold and nozzle assembly having an open center portion (figure 1, item 1); a collection tray having a central manway and located between the quench pipe manifold (figure 1, item 16 and top of item 1) and nozzle assembly for receiving fluid from a catalyst bed above the collection tray (figure 1, item 23); a mixing chamber having an open central portion and located below the collection tray and in fluid communication with the collection tray to receive two phase fluid flowing therefrom (figure 1, item 20); said mixing chamber having an open central portion substantially aligned with the central manway in the collection tray and large enough for a person to pass there through (figure 1, item 20); and a final distributor tray for distributing fluid to a catalyst bed below the distributor tray, said distributor tray having a central manway (figure 1, item 21 and bottom of item 1); a final distributor tray for distributing fluid to a catalyst bed below the distributor tray, said distributor tray having a manway and downcomer pipes having top slots and side orifices to accommodate flow of the two phase fluid stream (figure 1, item 21).

Claims 10, 18-19 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhagat et al. (4,960,571). Bhagat et al. teach a quench box for a multi-bed, mixed-phase cocurrent downflow fixed-bed reactor, comprising: a quench pipe manifold and nozzle assembly (Figure 1, items 17 and 18); a collection tray having a manway and located below the quench pipe manifold and nozzle assembly for receiving fluid from a catalyst bed above the collection tray (Figure 1, item 16); a mixing chamber located below the collection tray and in fluid communication with the collection tray to receive two-phase fluid stream flowing therefrom (space below collection tray); and a final distributor tray for distributing fluid to a catalyst bed below the distributor tray, said distributor tray having a manway (figure 1, item 26 and 28); where the final distributor tray has downcomer pipes to accommodate flow of the two phase fluid stream to a catalyst bed below (figure 1, item 31); where the manway in the quench box consists of only the manway of the collection tray (figure 1, item 16) and the manway of the distributor tray for a total of only two manways (figure 1, item 26); where the downcomer pipes have top slots and side orifices (figure 1, item 31 and 32).

Allowable Subject Matter

Claims 2-8, 11-14, and 16 are allowed. The following is an examiner's statement of reasons for allowance:

The prior art of record does not suggest or teach the particular structure of the mixing chamber.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant argues Grott does not show a "quench pipe manifold and nozzle assembly having an open center portion." The examiner disagrees. As stated in the previous office action, Grott teaches a quench pipe manifold and nozzle assembly (figure 1, items 17 and 18) having an open center portion (opening at figure 1, item 6).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the manway must be greater than 24 inches) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, the examiner would like to point out that applicant's statement that the 19" is not enough for a manway, applicant is reminded that the arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965).

Applicant argues feature 21 does not have top slots and side orifices. The examiner disagrees. It is the examiner's position that the openings make up the slot and the sides of the openings make up the side orifices.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

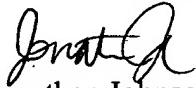
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Johnson
Primary Examiner
Art Unit 1725

jj